

Please replace the paragraph beginning on page 18, line 31, with the following rewritten paragraph:

92 When a ferrule is inclined, the bottom rear margin at point Pr rises up like a wall and becomes the high point of a barrier to free drainage from within the ferrule. In order to get beyond that barrier it is necessary to build a drainage trough 18 in the valve that, when installed in the valve 13 will provide an inlet at the process, the orifice 16, whose lower margin 20 forms the beginning of the trough 18 and which passes above or above and to the side of the bottom rearmost margin 8 of bore 3 down to an outlet 21 beyond the confines of the ferrule, the beginning 20 of drainage trough 18 at the base of orifice 16 being above the outlet 21 of the drainage trough 18 and where the drainage trough 18 constructed within the valve body that continuously descends at an angle greater than the angle of inclination of the axis of the ferrule's internal bore 3 when the valve is installed in the ferrule. A horizontal plane can be imagined to extend forward from point Pr wherein the drainage trough 18, beginning at the lower margin 20 of orifice 16 and passing back, just over and then beyond point Pr, is always above the horizontal plane but moving closer to it as the trough descends toward Pr, passing close but still above Pr and then beyond it to a point where it is free of the ferrule and can be drained out of the system. Thus, the beginning 20 of the drainage trough 18 (which is coincident with the base of the orifice) and the drainage trough 18 all of the way back to a point just beyond point Pr must be

Q2 above this imagined horizontal plane in order for the valve to freely drain process though the inclined bore 3 in ferrule 2 beyond the point Pr.

Please replace the paragraph beginning on page 19, line 24, with the following rewritten paragraph:

Q3 The vertical component, Div of Lf, is the diametric height lost in order to offset bore inclination. Div can be calculated anywhere along the bottom margin 56 of bore 3 by using the value of Lf at that point and the angle of inclination Aa of the internal bore 3. For a flush-mounting design, the full value of Lf would be used and the calculation would be as follows:

Please replace the paragraph beginning on page 20, line 1, with the following rewritten paragraph:

Q4 In order to actually achieve free drainage, it is necessary to impart some minimum angle of declination to drainage trough 20 that is in excess of the offset to angle Aa created by the diametric loss Div. The determination of what is a sufficient positive drain angle, Ab, is dependent on the process. The amount of diametric height necessary to create Ab in drainage trough 20 at any point along the bottom margin of bore 3 can be calculated by using the value of Lf at that point and Ab. For a flush mounted valve, the full value of Lf would be used:

Please replace the paragraph beginning on page 24, line 19, with the following rewritten paragraph:

Q5 In some large vessels equipped with relatively long steeply angled small diameter ferrules, it is not even possible to construct flush-mounting valve